

CLAIMS

What is claimed is:

1. A fire sprinkler drawing system, comprising:
 - a processor;
 - a memory coupled to the processor;
 - a display device coupled to the processor;
 - a drawing routine stored in the memory and adapted to be executed on the processor to produce a fire sprinkler system drawing of two or more interconnected fire sprinkler elements in response to a plurality of user initiated commands, wherein said drawing routine stores the fire sprinkler drawing in the memory and is adapted to display the fire sprinkler drawing on the display device; and
 - a voice processing unit stored on the memory and adapted to be executed on the processor to receive sound signals, to process the sound signals to generate a decoded command and to deliver the decoded command as one of the user initiated commands to the drawing routine for use in producing the fire sprinkler system drawing.
2. The fire sprinkler drawing system of claim 1, wherein the drawing routine is an object oriented routine that operates using an object oriented programming paradigm.
3. The fire sprinkler drawing system of claim 1, wherein the drawing routine is a computer aided drawing routine.
4. The fire sprinkler drawing system of claim 1, further including a set of recognized commands stored in the memory and wherein the voice processing unit is adapted to compare the decoded command to one or more of the recognized commands to determine if the decoded command is a valid command.
5. The fire sprinkler drawing system of claim 4, wherein the voice processing unit is adapted to fail to deliver the decoded command to the drawing routine if the decoded command does not match any of the set of the recognized commands.

6. The fire sprinkler drawing system of claim 1, wherein the voice processing unit is adapted to decode a drawing placement command that enables a user to place a building or a sprinkler system element into the fire sprinkler system drawing as displayed on the display device.

7. The fire sprinkler drawing system of claim 1, wherein the voice processing unit is adapted to decode a wizard initiation command that initiates a wizard routine that draws two or more interconnected fire sprinkler system elements within the fire sprinkler system drawing as displayed on the display device.

8. The fire sprinkler drawing system of claim 1, wherein the voice processing unit is adapted to decode an autodraw command that causes the drawing program to perform a drawing function related to placing a fire sprinkler system element within the fire sprinkler system drawing as displayed on the display device.

9. The fire sprinkler drawing system of claim 8, wherein the voice processing unit is adapted to decode an autodraw command comprising a command that places two or more fittings in the fire sprinkler system drawing.

10. The fire sprinkler drawing system of claim 8, wherein the voice processing unit is adapted to decode an autodraw command comprising a command that places sprinkler system hangers in the fire sprinkler system drawing.

11. The fire sprinkler drawing system of claim 1, wherein the voice processing unit is adapted to decode an edit command that enables the user to manipulate existing sprinkler system elements in the fire sprinkler system drawing.

12. The fire sprinkler drawing system of claim 1, wherein the voice processing unit is adapted to decode a view command that determines, changes or manipulates the size, contour or color of a fire sprinkler system element within the fire sprinkler system drawing.

13. The fire sprinkler drawing system of claim 12, wherein the voice processing unit is adapted to decode a view command that causes the drawing routine to display a fire sprinkler system element on the display device in three dimensions.

14. The fire sprinkler drawing system of claim 1, wherein the voice processing unit is adapted to decode a parts listing command that causes the drawing routine to display a list of one or more sprinkler system elements used within the fire sprinkler system drawing.

15. The fire sprinkler drawing system of claim 1, wherein the voice processing unit is adapted to decode a hydraulics calculation command adapted to cause the drawing routine to perform a hydraulic calculation with respect to the fire sprinkler system embodied in the fire sprinkler system drawing.

16. The fire sprinkler drawing system of claim 15, wherein the voice processing unit is adapted to decode a hydraulics calculation command that defines a remote area within the fire sprinkler system drawing.

17. The fire sprinkler drawing system of claim 15, wherein the voice processing unit is adapted to decode a hydraulics calculation command that performs a hydraulic analysis with respect to the fire sprinkler system embodied in the fire sprinkler system drawing.

18. The fire sprinkler drawing system of claim 1, wherein the voice processing unit is adapted to decode a software management command adapted to perform a file manipulation activity.

19. The fire sprinkler drawing system of claim 1, further including a database of information describing features and capabilities of the drawing routine stored on the memory and wherein the voice processing unit is adapted to decode a help command that provides the user access to the database of information describing features and capabilities of the drawing routine.

20. The fire sprinkler drawing system of claim 1, further including a microphone communicatively coupled to the voice processing unit.

21. A fire sprinkler drawing system for use on a computer having a processor, a display device, a voice input device, and a computer memory, the fire sprinkler drawing system, comprising:

a memory;

a drawing routine stored on the memory and adapted to be executed on the processor to produce a fire sprinkler system drawing of two or more interconnected fire sprinkler elements in response to a plurality of user initiated commands, wherein said drawing routine is adapted to store the fire sprinkler drawing in the computer memory and is adapted to display the fire sprinkler drawing on the display device; and

a voice processing unit stored on the memory and adapted to be executed on the processor to receive sound signals from the voice input device, to process the sound signals to generate a decoded command and to deliver the decoded command as one of the user initiated commands to the drawing routine for use in producing the fire sprinkler system drawing.

22. The fire sprinkler drawing system of claim 21, wherein the drawing routine is an object oriented routine that operates using an object oriented programming paradigm.

23. The fire sprinkler drawing system of claim 21, wherein the drawing routine is a computer aided drawing routine.

24. The fire sprinkler drawing system of claim 21, further including a set of recognized commands stored in the memory and wherein the voice processing unit is adapted to compare the decoded command to one or more of the recognized commands to determine if the decoded command is a valid command.

25. The fire sprinkler drawing system of claim 24, wherein the voice processing unit is adapted to fail to deliver the decoded command to the drawing routine if the decoded command does not match any of the set of the recognized commands.

26. The fire sprinkler drawing system of claim 21, wherein the voice processing unit is adapted to decode a drawing placement command that enables a user to place a building or a sprinkler system element into the fire sprinkler system drawing as displayed on the display device.

27. The fire sprinkler drawing system of claim 21, wherein the voice processing unit is adapted to decode a wizard initiation command that initiates a wizard routine that draws two or more interconnected fire sprinkler system elements within the fire sprinkler system drawing as displayed on the display device.

28. The fire sprinkler drawing system of claim 21, wherein the voice processing unit is adapted to decode an autodraw command that causes the drawing program to perform a drawing function related to placing a fire sprinkler system element within the fire sprinkler system drawing as displayed on the display device.

29. The fire sprinkler drawing system of claim 28, wherein the voice processing unit is adapted to decode an autodraw command comprising a command that places two or more fittings in the fire sprinkler system drawing.

30. The fire sprinkler drawing system of claim 28, wherein the voice processing unit is adapted to decode an autodraw command comprising a command that places sprinkler system hangers in the fire sprinkler system drawing.

31. The fire sprinkler drawing system of claim 21, wherein the voice processing unit is adapted to decode an edit command that enables the user to manipulate existing sprinkler system elements in the fire sprinkler system drawing.

32. The fire sprinkler drawing system of claim 21, wherein the voice processing unit is adapted to decode a view command that determines, changes or manipulates the size, contour or color of a fire sprinkler system element within the fire sprinkler system drawing.

33. The fire sprinkler drawing system of claim 32, wherein the voice processing unit is adapted to decode a view command that causes the drawing routine to display a fire sprinkler system element on the display device in three dimensions.

34. The fire sprinkler drawing system of claim 21, wherein the voice processing unit is adapted to decode a parts listing command that causes the drawing routine to display a list of one or more sprinkler system elements used within the fire sprinkler system drawing.

35. The fire sprinkler drawing system of claim 21, wherein the voice processing unit is adapted to decode a hydraulics calculation command adapted to cause the drawing routine to perform a hydraulic calculation with respect to the fire sprinkler system embodied in the fire sprinkler system drawing.

36. The fire sprinkler drawing system of claim 35, wherein the voice processing unit is adapted to decode a hydraulics calculation command that defines a remote area within the fire sprinkler system drawing.

37. The fire sprinkler drawing system of claim 35, wherein the voice processing unit is adapted to decode a hydraulics calculation command that performs a hydraulic analysis with respect to the fire sprinkler system embodied in the fire sprinkler system drawing.

38. The fire sprinkler drawing system of claim 21, wherein the voice processing unit is adapted to decode a software management command adapted to perform a file manipulation activity.

39. The fire sprinkler drawing system of claim 1, further including a database of information describing features and capabilities of the drawing routine stored on the memory and wherein the voice processing unit is adapted to decode a help command that provides the user access to the database of information describing features and capabilities of the drawing routine.

40. A building construction drawing system, comprising:

a processor;

a memory coupled to the processor;

a display device coupled to the processor;

a drawing routine stored in the memory and adapted to be executed on the processor to produce a building construction system drawing of two or more interconnected building construction elements in response to a plurality of user initiated commands, wherein said drawing routine stores the building construction system drawing in the memory and is adapted to display the building construction system drawing on the display device; and

a voice processing unit stored on the memory and adapted to be executed on the processor to receive sound signals, to process the sound signals to generate a decoded command and to deliver the decoded command as one of the user initiated commands to the drawing routine for use in producing the building construction system drawing.

41. The building construction drawing system of claim 40, wherein the drawing routine is an object oriented routine that operates using an object oriented programming paradigm.

42. The building construction drawing system of claim 40, wherein the drawing routine is a computer aided drawing routine.

43. The building construction drawing system of claim 40, further including a set of recognized commands stored in the memory and wherein the voice processing unit is adapted to compare the decoded command to one or more of the recognized commands to determine if the decoded command is a valid command.

44. The building construction drawing system of claim 40, wherein the voice processing unit is adapted to decode a drawing placement command that enables a user to place a building construction system element into the building construction system drawing as displayed on the display device.

45. The building construction drawing system of claim 40, wherein the voice processing unit is adapted to decode a wizard initiation command that initiates a wizard routine that draws two or more interconnected building construction system elements within the building construction system drawing as displayed on the display device.

46. The building construction drawing system of claim 40, wherein the voice processing unit is adapted to decode an edit command that enables the user to manipulate existing building construction system elements in the building construction system drawing.

47. The building construction drawing system of claim 40, wherein the voice processing unit is adapted to decode a view command that determines, changes or manipulates the size, contour or color of a building construction system element within the building construction system drawing.

48. The building construction drawing system of claim 40, wherein the voice processing unit is adapted to decode a parts listing command that causes the drawing routine to display a list of one or more building construction system elements used within the building construction system drawing.

49. The building construction drawing system of claim 40, further including a database of information describing features and capabilities of the drawing routine stored on the memory and wherein the voice processing unit is adapted to decode a help command that provides the user access to the database of information describing features and capabilities of the drawing routine.